

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/054776 A1

(51) International Patent Classification⁷: **G01B 7/00**

(21) International Application Number:
PCT/EP2004/052972

(22) International Filing Date:
16 November 2004 (16.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
BO2003A000694
20 November 2003 (20.11.2003) IT

(71) Applicant (for all designated States except US): **MARPOSS SOCIETA' PER AZIONI** [IT/IT]; via Saliceto 13, I-40010 BENTIVOGLIO BO (IT).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **DALL'AGLIO, Carlo** [IT/IT]; via Brigadiere Lombardini 5, I-40050 CASTELLO D'ARGILE BO (IT).

(74) Common Representative: **MARPOSS SOCIETA' PER AZIONI**; Patent Department, via Saliceto 13, I-40010 BENTIVOGLIO BO (IT).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

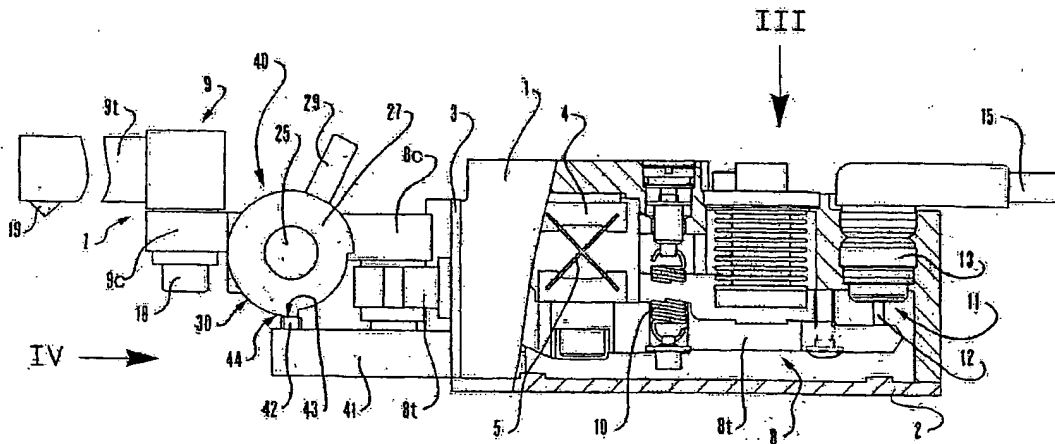
— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report

[Continued on next page]

(54) Title: **HEAD FOR THE LINEAR DIMENSION CHECKING OF MECHANICAL PIECES**



(57) Abstract: A gauging head includes a substantially closed casing, a movable arm with a first portion, partly located inside the casing and associated with a position transducer, and a second portion, outside the casing, carrying a feeler for contacting a piece to be checked, and a zero-setting mechanism for adapting the head to check pieces with different nominal dimensions. The zero-setting mechanism, located outside the casing, includes a quick locking/unlocking device between the first and second portions of the arm and a movable mechanical reference coupled with the first portion of the arm and including a reference surface cooperating with a corresponding reference surface for holding the first portion of the arm in a preset position with respect to the casing. The quick locking/unlocking device and the movable mechanical reference are operated together for unlocking the coupling between the portions of the arm and concurrently hold the preset position, and for locking together the two portions and concurrently release the arm.

WO 2005/054776 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.